

Comment Set 37, cont.

ATTACHMENT

SFPP, L.P. DEIR COMMENTS

Green Valley Fault. Pipeline construction Preliminary design for the Green Valley Fault crossings assumes there is the potential for pipeline rupture. This pipeline crossing shall be constructed utilizing minimum 0.5-inch pipe wall thickness. MOVs shall be installed on both sides of the fault crossing. An MOV at MP 9.77, a check valve at MP 10.28, and a check valve at MP 10.95 shall be installed to limit the volume of product released should rupture occur. these valves shall be installed at or near MP 10.0 and 10.52 or such other location determined by the CSLC during review and approval of final pipeline design plans. Pipeline design shall also follow the general parameters described above as appropriate.

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Cordelia Fault. MOVs shall be installed on both sides of the fault crossing to limit the volume of product released should rupture occur; if determined to be necessary by the CSLC during review and approval of final pipeline design plans. The design analysis for the Cordelia fault crossing indicates that there is not the potential for pipeline rupture. Pipeline design shall also follow the general parameters described above as appropriate. The crossing shall be constructed utilizing 0.5-inch pipe wall thickness.

G-5b Pipeline Operations Plan

The requirements for operation, testing, and inspection of liquid pipelines in the State of California are within the jurisdiction of the US Department of Transportation and the California State Fire Marshall. The Code of Federal Regulations, Title 49, Part 195 addresses the operation, testing, and inspection of liquids pipelines. In accordance with these regulations, SFPP already has a program in place for operating, testing, and inspecting its pipelines. The programs are described in various manuals including the Integrated Contingency Plan (which replaced the Emergency Response Manual and Marine Water Appendices in January 2003). The agencies charged with oversight of these programs have sufficient expertise to adopt environmentally protective programs. The EIR presents no data or analysis showing why additional regulation by CSLC, over and above that required by the agencies listed above, is necessary or how it would provide any greater protection for the environment than compliance with the regulations of the agencies already entrusted with the regulation of pipelines.

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SFPP requests the following changes:

Pipeline Operations Plan. At least 60-days prior to placing the proposed pipeline into service, SFPP shall submit to the CSLC-California State Fire Marshall (CSFM) for final review and approval, a revised Pipeline Operations and Maintenance Plan (POMP) incorporating any operational and maintenance changes that are required for this project. The POMP shall address internal and external maintenance inspections of the completed facility, including details of the integrity testing methods to be applied, corrosion monitoring and testing of the cathodic protection system, leak monitoring, emergency response procedures and protocols. The POMP shall also include and address all applicable operational mitigation measures contained in this document including, but not limited to, geohazard analysis for monitoring fault crossings, procedure for pigging the pipeline in the vicinity of fault crossings following a seismic event, liquefaction areas,

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SFPP, L.P. DEIR COMMENTS

~~landslide zones, and settlement.~~ Within three months following promulgation of any new Federal or State regulation relating to issues and requirements contained in the approved POMP, SFPP shall update the POMP and submit a revised copy to the (CSFM) CSLC for review and approval.

SFPP shall incorporate the following practice into the POMP for review and approval by the CSLC at least 60-days in advance of construction:

- ◆ Immediately following an earthquake within the parameters shown in the table below, that causes pipeline rupture, or that causes the pipeline to be shut-down, qualified SFPP operations personnel shall inspect all parts of the pipeline alignment that fall within the specified distance of the earthquake epicenter for evidence of ground deformation (e.g., cracks or displacements). If surface fault rupture is reported or observed, the pipeline alignment within at least 1,000 feet of the rupture shall be inspected. SFPP shall submit reports of its findings to the CSLC CSFM. In the event of pipeline shut-down or rupture due to a seismic event, the pipeline shall not be re-operated without prior notification to the CSFM, review and approval by the CSLC

37-47

G-6a Excavation Safety and Trench Design

The discussion of this potential impact on page D.7-23 is specific to the Concord Station due to the specific geology that exists at that location; however, the wording of this measure, as well as the Mitigation Table (F-1), indicates that this is an alignment wide impact despite the fact that there is no discussion in the EIR that OSHA-approved shoring would not be adequate or that additional mitigation measures are necessary for locations other than the Concord Station.

Potential ground motion data has been previously obtained for this project. Review of its impact on proposed OSHA-approved shoring at the Concord Station will be evaluated.

SFPP requests the following changes:

Excavation Safety and Trench Design. In order to ensure the safety of excavations, a geotechnical investigation of the potential ground motions shall occur. The results and recommendations of the investigation shall be provided to the excavation design team and along the entire pipeline. OSHA-approved shoring shall be used at all times when shoring is required. Within the SFPP Concord Station, potential impacts of groundshaking shall be assessed to determine the adequacy of OSHA-approved shoring. Any necessary enhancements to OSHA-approved shoring within the Concord Station shall be incorporated into the final trench design, subject to CSLC review and approval at least 60 days in advance of construction.

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SFPP, LP. DEIR COMMENTS

G-7a Reduce Liquefaction Hazard (page D.7-24)

The DEIR does not currently include a Table D.7.4

37-49

Once the pipeline is installed and full of product, the pipeline will be negatively buoyant. As a result if liquefaction occurred while the pipeline is in operation it would tend to sink. The Finite Element Analysis (FEA) indicates that the proposed pipeline can withstand between 4 feet (0.375" WT pipe) and 5 feet (0.500" WT pipe) of non-transitional vertical displacement without rupture. Relative to liquefaction, a minimum 80-foot continuous vertical liquefiable soil zone would be required to result in this level of settlement with an assumed volumetric strain between 3 to 5 percent. This extent of liquefiable soils is unlikely because a review of existing subsurface information indicates that the bay mud and alluvial soils that would be subject to liquefaction are predominantly clay and cohesive silt with only minor non-plastic silt and sand interbeds. Based on the information collected and reviewed to date, there is no need to gather additional site-specific soil data to further assess the impacts of potential liquefaction-induced settlement on the pipeline.

Based on engineering calculations, liquefaction-induced buoyancy will only be an issue for this project if the pipeline is empty (either initially during construction or upon some future evacuation.) A preliminary evaluation of the soils along the alignment indicated potentially liquefiable silts and sands occur as discontinuous lenses and pockets with a limited aerial extent, therefore the potential that significant upward displacement of the pipeline would occur is minimal.

For those areas identified as having the potential of lateral spreading, SFPP will route the pipeline to avoid the area where feasible. Where routing around a potential lateral spreading area is not feasible, SFPP will design the pipe with thicker wall, position it so that the pipeline is in tension, and utilize pipeline trench configuration designed to minimize lateral spreading loadings.

SFPP requests the following changes:

Reduce Liquefaction Hazard. Final geotechnical ~~investigations~~ analysis shall be conducted in the areas of medium and high liquefaction potential underlain by Younger Bay Mud and by recent alluvium at all creek and river crossings, including soils in the Yolo Bypass and near the Deep Water Ship Channel. ~~EIR Table D.7.4 lists the mileposts at each location of potential liquefaction (boundaries between significantly different soil types).~~ The results and recommendations of the geotechnical ~~investigations~~ analysis shall be incorporated into the final pipeline design. If moderate to high liquefaction potential is confirmed by geotechnical analyses, then design measures shall be implemented to account for the potential buoyant forces (both positive and negative) that may be exerted on the pipeline at the corresponding location. Appropriate design is dependent on site-specific conditions and could include the following specific options:...

Comment Set 37, cont.

ATTACHMENT

SFPP, L.P. DEIR COMMENTS

G-8a Protection from Seiche Inundation (page D.7-25)

This mitigation measure should be reworded to require an analysis to evaluate wave run-up and erosion potential. No subsurface investigation is needed for this evaluation. The following revisions are proposed:

Protection from Seiche Inundation. ~~Final geological investigations shall be conducted in the vicinity of the Carquinez Strait crossing points~~ An analysis to evaluate wave run-up and erosion potential shall be conducted to identify and map local conditions that may be impacted by a series of seiche waves on the order of 3 to 5 feet high. The report shall ...

37-50

Hydrology and Water Quality

Mitigation Measures

HS-1d Pacheco Slough Crossing (page D.8-14)

SFPP has only considered open cut construction feasible at waterways where there is little or no flowing water present. The Pacheco Creek crossing has been identified as one in which open-cut construction could be feasible. As the mitigation is written, a small isolated puddle would preclude the ability to open cut.

SFPP requests the following changes:

Pacheco Slough Crossing. If any flowing water is present or expected to be present during construction in Pacheco Slough, Pacheco Slough shall be crossed using directional drilling methods (HDD and/or boring), as approved by the CSLC and the appropriate jurisdictional agencies.

37-51

HS-3a Response to Unanticipated Release of Drilling Fluids (page D.8-15)

SFPP intends to install the pipeline at least 30 feet below the scour depth at all HDD crossings. If a depth of 30 feet cannot be accomplished, site-specific geotechnical data will be obtained and evaluated to determine if a shallower depth would be feasible. SFPP intends to obtain site-specific geotechnical data at the two CSLC jurisdictional HDD water crossings to satisfy CSLC lease conditions.

Round-the-clock (including nighttime) drilling may be required on the longer HDD crossings to insure that the borehole is maintained and that the drill string doesn't get stuck.

SFPP requests the following changes to bullets 2, 6, and 11:

37-52

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SFPP, L.P. DEIR COMMENTS

- ◆ ~~Obtain site specific geotechnical data at all water crossings where HDD is to be used to determine the appropriate depth below bed of waterway. All HDD water crossings shall be installed a minimum of 30 feet below the water bed scour line unless site specific geotechnical data indicates that a shallower depth would be feasible.~~
- ◆ No nighttime drilling shall be allowed unless ~~absolutely~~ required to maintain the integrity of the borehole or prevent the drill string from getting stuck.
- ◆ If nighttime drilling is required, use non-toxic fluorescent dye in the drilling mud to allow easier identification of frac-outs.

37-52

GW-4a Install Thicker-Wall Pipeline or Weight Coating in Strategic Areas (page D.8-24)

Based on engineering calculations, positive buoyancy will only be an issue for this project if the pipeline is empty (either initially during construction or upon some future evacuation), if the pipeline is installed in very shallow groundwater (pipeline submerged in water) and if the backfill over the pipeline is unconsolidated (liquefied). Minus any one of these conditions, the combination of the weight of the pipe and the weight of the backfill will exceed the upward buoyant force and prevent the pipeline from floating. Given the ability during construction to either temporarily fill the pipe with water, dewater the trench, use consolidated backfill or install river weights (or equivalent) the potential impacts of positive buoyancy can be overcome during initial pipeline installation. As a result, concrete coated pipe is no longer anticipated for use on this project.

37-53

With the ability to mitigate the impact of positive buoyancy during construction, the need to obtain groundwater data prior to construction is not necessary. In fact because of the seasonal fluctuation of the groundwater table along the proposed pipeline route, any data collected in advance of construction would have limited value for the construction effort.

While the pipeline is empty, the only event that could occur that would result in the pipeline becoming positively buoyant would be seismic induced liquefaction. Immediately following and earthquake, the pipeline alignment shall be inspected for evidence of liquefaction. If evidence of liquefaction is observed, field investigation of the pipeline will be performed and the pipeline would be lowered, if needed.

The use of thicker-walled or concrete coated pipe as a mitigation for 3rd party damage or near water wells is not consistent with industry practice and there is no analysis in the EIR to quantify the added level of protection against 3rd party damage to pipe near a municipal well, if any, that would occur by requiring these measures. Line marking, USA notification, line-riding, and warning tape measures previously identified in the DEIR will be much more effective measures. Since information on the added benefit of this mitigation is not provided, the additional cost of concrete coated pipe places a burden on SFPP that cannot be justified.

Comment Set 37, cont.

ATTACHMENT

SFPP, L.P. DEIR COMMENTS

SFPP requests that this mitigation measure be revised as follows:

Install Thicker-Wall Pipeline or Weight Coating in Strategic Areas. Where the pipeline is placed within a shallow aquifer and consolidated backfill cannot adequately restrain the pipe, or in an area likely to be disturbed by future construction activity near municipal wells, SFPP shall install a thicker-walled pipe, weigh the pipe with water, install river weights, or heavy coating (such as concrete) to the pipeline to mitigate potential positive buoyancy during construction. ~~In the event the pipeline temporarily does not contain fuel, SFPP shall monitor the route for potential seismic-induced liquefaction if a seismic event occurs, and to provide additional protection from third-party damages. These areas shall be identified by SFPP in the final design drawings a report submitted to the CSLC at least 60 days before construction showing all areas along the approved route with groundwater levels of less than 20 feet.~~

37-53

GW-4b Water Well Protection (page D.8-24)

It may not be possible to maintain a 200-foot buffer from all municipal water supply wells in the area without impacting vernal pools or other sensitive environmental area. SFPP requests the flexibility to work with water district and well owners to achieve the protection desired without an arbitrary buffer zone.

37-54

SFPP proposes the following revision:

GW-4b Water Well Protection. During final pipeline design, SFPP shall identify any existing public water supply well within 200 feet of the proposed pipeline centerline, that the pipeline and all construction activity are located at least 200 feet from any existing water well. Depending on the geology of any particular location, a greater separation or special pipeline design features (e.g., use of thicker-walled pipe to further protect against third-party damage) may be required. For any well within 200 of the proposed pipeline centerline, SFPP shall coordinate with the well owner and include protective measures (e.g. thicker-walled pipe) as necessary. In addition, ...

Land Use, Public Recreation and Special Interest Areas

Mitigation Measures

LU-1a Construction Notification (page D.9-18)

More flexibility for minor schedule deviation is required and SFPP requests the following change:

LU-1a Construction Notification. ... If construction delays of more than 14 ~~7~~ days occur, an additional notice shall be made, either along the construction ROW or by mail.

37-55

Comment Set 37, cont.

ATTACHMENT

SFPP, L.P. DEIR COMMENTS

LU-2b Compensation to Land Owners (page D.9-19)

Prior to construction, SFPP obtains an easement from and provides an offer for compensation to the property owner. The amount of actual compensation is determined after construction when final damages are known.

SFPP requests the following modification:

LU-2b Compensation to Land Owners. Prior to the start of construction, the Applicant shall ~~enter into an agreement~~ negotiate an easement and submit an offer letter to each land...

37-56

Transportation and Traffic

Mitigation Measure

T-6a Restoration of Roads (page D.12-14)

The City of Fairfield has indicated the potential desire to leave the road restoration incomplete because of proposed Public Works projects that are scheduled to occur shortly after completion of the pipeline.

SFPP requests the following modification:

Restoration of Roads. Roads disturbed by construction activities or construction vehicles shall be restored to at least pre-construction conditions to ensure long-term protection of road surfaces unless otherwise directed and approved by the local jurisdiction. Care...

37-57

T-7a Coordinate with Public Transit (page D.12-15)

As worded, proof of 30-day advance coordination with transit agencies must be provided to CSLC 60 days prior to construction. This is inconsistent, confusing, and unduly burdensome to SFPP.

SFPP requests the following modification:

Coordinate with Public Transit. SFPP shall coordinate construction activities at least 30 days in advance with potentially impacted public transit agencies to avoid disruption to transit operations. Public... SFPP shall document coordination with transit agencies and provide documentation of this coordination to the CSLC ~~60 days~~ prior to the start of construction.

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Comment Set 37, cont.

ATTACHMENT

SFPP, L.P. DEIR COMMENTS

Environmental Justice

Mitigation Measures

EJ-2a Spill Containment and Response (page D.14-16)

This mitigation measure appears to be unrelated to any impacts that would result based on the significance criteria presented in Section D.14.2.1. It is not practical to store this equipment where appropriately trained spill response personnel are not located, and we request that this mitigation measure be deleted. Also see comment to mitigation measure S-2a related to the location of spill response equipment.

37-59

MITIGATION MONITORING – DEIR SECTION F

There are numerous items in the table in this section that are inconsistent with the text in Section D. Additionally, the Timing column on numerous mitigation measures indicates “prior to construction” when they probably should say prior to operation. We anticipate that there will be revisions to this table in response to comments on the DEIR. SFPP would be pleased to assist in developing the summary language for these tables so that they can be developed as a useful tool to the construction contractor and SFPP as well as the CSLC as the lead agency and other responsible agencies.

37-60